

Summer 1994

The Effects of Athletic Participation on Self-Concept, Daily School Attendance, and Grade Point Average of Female Seventh-Grade Students in Urban Schools

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The Effects of Athletic Participation on Self-Concept, Daily
School Attendance, and Grade Point Average of Female Seventh
Grade Students in Urban Schools

by

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A Dissertation Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
Requirement for the Degree of

Doctor of Philosophy

Urban Services

Old Dominion University
August 1994

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Abstract

The Effects of Athletic Participation on Self-Concept, Daily School Attendance, and Grade Point Average of Female Seventh Grade Students in Urban Schools

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Old Dominion University, 1994
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This study examined the effects of athletic participation on self-concept, daily school attendance, and grade point average on 503 seventh grade students in urban middle schools. A 2 X 3 factorial MANOVA analyzed self-concept data to determined differences in self-concept associated with the levels of athletic participation with that of pre- and post-treatment test periods. Tukey's post hoc tests were incorporated when a significant F ratio was demonstrated ($p < 0.05$). Significant differences were noted in four areas of self-concept as defined by Piers-Harris (1984): (1) intellectual and school status (Tukey, $p < 0.05$), (2) physical appearance and attributes (Tukey, $p < 0.05$), (3) anxiety (Tukey, $p < 0.05$), and (4) popularity (Tukey, $p < 0.05$). No significant differences were noted in three areas of self-concept: (1) behavior, (2) happiness and satisfaction, and (3) self-concept total.

A 3 X 3 factorial ANOVA demonstrated statistical differences in daily school attendance between female students participating in interscholastic athletics with female students not participating in interscholastic athletics. Daily school attendance reports were collected

to coincide with three grading periods. Tukey's post hoc tests were incorporated when a significant F ratio was demonstrated (Tukey, $p < 0.05$). Students not participating in interscholastic athletics noted higher absenteeism than students who participated in interscholastic athletics (Tukey, $p < 0.05$).

A 3 X 3 factorial ANOVA demonstrated statistical differences in grade point averages between female students participating in interscholastic athletics with those female students not participating in interscholastic athletics. Grade point averages of the two-sport participants were significantly higher than the one-sport participants (Tukey, $p < 0.05$). Grade point averages of the one-sport participants were significantly higher than the no-sport participants (Tukey, $p < 0.05$).

Results suggest positive effects of athletic participation on self-concept, daily school attendance, and grade point average of female seventh grade students in urban middle schools participating in interscholastic sports programs.

Acknowledgements

Many have assisted in this study and to those a special thank you is extended.

To my dissertation chairperson, Dr. Petra Snowden, for her guidance, assistance, and commitment throughout the doctoral program.

To Dr. Jane Hager, Concentration Director, for her insight into women's studies and assisting me with securing valuable research literature which was crucial in establishing the foundation of this study.

To Committee member, Dr. Michael Woodhouse, for his patience, expertise, and many hours of individualized attention which allowed me to see direction more clearly. Without his assistance, the ABD may have been a reality.

To Committee member, Dr. Beverly Johnson for her understanding, patience, and advice.

To statistician, Dr. Christine Philput for her guidance, patience, and statistical expertise.

To Dr. Robert A. Cowden for his encouragement, advice, and continual support.

To my wife, Sandra, and my children, Tammy and David, for their continual uplifting support and patience.

To the numerous colleagues who offered insight, encouragement, and reassurance.

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Chapter I

History demonstrates that during challenging fiducial crises middle school athletics are typically reduced or eliminated. Since the 1972 passage of the Civil Rights Act, educators have evaluated athletic programs and undertaken the task of determining the effectiveness of athletic participation on specific psychological and sociological variables.

Statement of Purpose

The purpose of this study is to determine whether or not female seventh grade students participating in interscholastic athletics in urban middle schools differ significantly from those who choose not to participate in interscholastic athletics on measures related to self-concept, daily school attendance, and grade point average. Investigative outcomes will assist school administrators in developing policy regarding middle school athletics and specifically determine the effects of athletic participation on self-concept, daily school attendance, and grade point average.

Interscholastic Athletics Controversy

The question of providing interscholastic athletics within the educational setting is debatable. Critics assert that athletic programs are unnecessary and often harmful to the educational process (Rehberg, 1969). These opponents perceive athletics as diverting energy from substantive pursuits and desirable academic career aspirations towards

more frivolous activities such as school superiority and community honor (Rehberg, 1969). According to Eidsmore (1963), some educators believe athletes do not perform academically as well as their non-athletic classmates.

Advocates of middle school athletics emphasize certain acquired psychological and sociological values which enhance desirable traits such as citizenship, sportsmanship, cooperation, and character as being beneficial outcomes of athletic participation (Erwin, 1979). The National Education Association lists some additional potential values of athletic participation to include the "development of competitive spirit, acquisition of manners, courage, gratification, persistence, and a release from aggressive impulses" (Educational Policy Commission, 1954, pp. 3-4). Each of these benefits contributes directly in human development; a major goal of education. It therefore reasons that students develop confidence in their individual abilities to obtain skills essential in acquiring competence to manage their respective environments.

The implication that schools are finite energy systems with various components was first introduced by Coleman (1965). Academic, athletic, and social experiences are typically found in almost every system. Coleman's beliefs were based on the idea that each student will develop an area in which to compete. Activities rewarded are those for which there is strong competition. The individual who

achieves, however, is usually the one with the greater potential in that area. In contrast, unrewarded activities often do not attract those with the greatest ability to compete. Consequently, the greatest achievers may be those with lesser ability. Athletic activities provide not only another opportunity for students' voluntary participation but also create areas for strong competition with many potential rewards (i.e., fitness, teamwork, dedication, self-esteem).

The controversy regarding athletics has a historical foundation. In 1938, the American Association of Health, Physical Education and Recreation (AAHPER) passed a resolution which encouraged educational leaders to discontinue interscholastic competition below the tenth grade (Bucher, 1974). During ages of rapid growth, subsequent bodily weaknesses, mental and emotional stresses, and interscholastic competition could be more harmful than helpful (Bucher, 1974). The AAHPER 1938 resolution had profound effects upon junior high school athletic programs throughout the United States. Some localities eliminated athletic programs while other localities reduced them. Many educators, however, disagreed with the resolution and maintained athletic programs.

The negative view of athletic participation for young children continued. In 1951, the American Association of School Administrators (AASA), citing the same reasons as the

1938 AAHPER, declared that interscholastic athletics was not recommended for junior high school boys (Bucher, 1974). In 1954, the Joint Committee on Athletic Competition (JCAC) for children of elementary and junior high school extended the recommendation for no athletic participation for males to include no athletic participation for females (Educational Policies Commission, 1979).

Building upon the athletic participation controversy, Tompkins and Roe (1958) surveyed over 2,000 principals representing ninety percent of the total junior high school enrollment in the United States. Their findings reported that (1) 85% of the surveyed schools had some form of interscholastic athletics; (2) 78% of the principals surveyed favored junior high school interscholastic athletics; and (3) only 15% of the principals were opposed. Obviously, the opinions of these administrators were contradictory to the recommendations of some of the noted professional organizations. It should be noted that Tompkins and Roes' (1958) survey was conducted 20 years after the first resolution to eliminate athletic programs for students below the tenth grade, and some of those same organizations were also re-evaluating their original resolutions.

In 1975, Baca, Howard, and Howard surveyed over 400 junior high and middle schools representing Arizona, California, Colorado, and New Mexico. This survey found

that 76% of the 400 junior high and middle schools had interscholastic athletic programs for boys and 51% of the 400 junior high and middle schools had interscholastic athletic programs for girls. The results of these surveys established support for interscholastic athletic programs at the junior/middle school level.

The decade of the 1980s noted a significant increase in repeated incidences where students continually fantasized of becoming professional athletes rather than scholars (Scherer, 1990). Interestingly, 24% the nation's high school football and basketball players were also functionally illiterate and some critics felt this was a consequence of students' misdirection in athletics (Scherer, 1990). The results of Scherer's investigation presented a negative image of student-athletes and suggested that good students often resent athletes for their poor attitudes toward academics and for receiving favored treatment by teachers. Unfortunately, the study also revealed that many non-athletic students resent the educational system for failing to develop a balance between academics and athletics

Alfie Kohn (1986) argued that competition in the classroom and in the gym inevitably has destructive effects upon youth. These destructive effects create significant anxiety. Kohn suggested the elimination of athletic and academic competition due to competition's negative effect upon youth.

Today, criticism of competitive sports in school comes in two new forms: gender and equity (Leo, 1993). Boys tend to grow up playing competitive games; girls do not. Thus, girls reach school age athletically disadvantaged. Schools also give preferential treatment (e.g., financial, facilities, equipment, publicity) to the boys athletic programs. Secondly, a more serious argument stems from the "equity issue" which centers on the basic concept that nobody is better than anybody else. Competitive sports produce "winners" and "losers," and "winners" are thought to be somehow better than "losers."

Most school administrators and educators believe that through sports, children learn how to deal with both defeat and victory (Leo, 1993). Children can learn to lose without humiliation and to win without believing themselves to be superior (Leo, 1993). Competitive sports offer much, but proper direction must be provided. The overall instructional goal of any educational system, regardless of the level, is to develop an integrated program that will allow students to maximize their intellectual, physical, emotional, moral, and social capacities (Hovland, 1990).

An important ingredient to a well-organized educational program is a well-structured program which serves as a link between academic and student activities. Basing the athletic program in a middle school upon the same philosophy that governs academics and non-athletic activities is

essential. The goal of the athletic program should be consistent with providing all students the opportunity to realize their maximum potential (Hovland, 1990).

A healthier self-concept for the appropriate child development remains essential. Young people, especially those living in urban cities, are growing up in a negative, problematic, and even neurotic society (Friedland, 1992). According to the National Institute of Medicine (NIM) (cited in Friedland, 1992), 22% of all American children under the age of 18 may be suffering from some type of mental disorder. The teenage suicide rate increases every year. Drug and alcohol abuse is considered at an epidemic level. One million American teenage girls have unwanted pregnancies each year (Friedland, 1992). The sum result is not only seen in alarming death rates but also in low self-interest, low motivation, low achievement, and low self-esteem (Patton, 1981; Press, 1988).

Poor self-concept is often noted to be the central cause of many of these youth problems. Wylie (1971) and Purkey (1971) noted a high correlation between healthy self-concept and many desirable behaviors including higher academic achievement and improved daily school attendance. The converse of these behaviors is correlated with poor self-concept (Wylie, 1971). Purkey (1971) found a significant, positive relationship between student self-concept and school performance. Students who have a

positive self-concept are most likely to succeed.

The findings of the California State Department of Education (1990) support the positive relationships of success and self-concept. More importantly, the findings affirm that every school district should adopt the promotion of self-esteem as a clearly stated educational goal. Healthy self-concept, therefore, is an indispensable quality for all young people.

Gender Issue

The passage of the 1972 Civil Rights Act and the implementation of Title IX challenged the male dominance of sport and brought the realization of equality to both the academic and the athletic realm (Aquila, 1981). Discussion of gender differences in sport and educational achievement inevitably stimulates disagreement. Perceptions of sex roles typically change unevenly among people of different age, racial or ethnic groups, and even gender. Consequently, objective reporting on differences becomes a difficult task. Gender equity issues are still not well understood by many educators (American Association of University Women, 1992).

The continual interaction between cultural and social expectations and educational and athletic achievement influences the choices that young men and women make, the advice they receive, and the opportunities afforded them. Perceived roles for anticipated occupations or careers help

shape academic interest and performance. The attitudes that develop, the successes and the failures in school subjects, and perceptions of attainable occupations affect the choices of the students' curriculum as well as their self-concept (AAUW, 1992). These choices differ somewhat between gender in many academic subjects and athletic opportunities (ETS, 1990, AAUW, 1992).

In addition to expectations and achievement, physical growth of students varies most between the fifth and eighth grades (Campbell, 1992). Boys tend to mature slower than girls until the middle school grades. A look at middle school students will produce a contrast between muscular, physically mature boys and girls and frail, underdeveloped immature boys and girls. Unfortunately, childrens' bodies and minds do not mature at the same rate (Campbell, 1992).

Middle school students quickly develop a new concern for their appearance. Chase and Drummer (1992) report this concern as the most important determinant of female popularity. Physical appearance is a major topic for discussion and critically important in the formation of self-concept. Simply, athletics provides an opportunity for physical fitness. Boys tend to emphasize the participation in sports as the most important determinant of male popularity. Girls in grades six and seven rate being popular and well-liked being more important than being perceived as competent or independent. Boys are more likely

to rank independence and competence as most important (Chase & Dummer, 1992; Simmons & Blyth, 1987). Group membership is important to both genders (Simmons & Blyth, 1987).

Regardless of the students' concern for self-concept, the American Association of University Women (1992) reports that available data on girls in school reveals compelling evidence that girls do not receive the same quality of education as boys. Girls do not receive equitable amounts of teacher attention and are not encouraged to pursue athletic endeavors. As a result, girls do not keep pace with their male classmates in areas such as higher level mathematics and measures of self-concept (AAUW, 1992). Teachers and administrators must be prepared and encouraged to bring gender equity and awareness to every aspect of schooling (AAUW, 1992).

To provide answers for the critics, the ever resistant taxpayer, and the school administrators' need to regulate budgets, athletic programs will continue to be evaluated and to remain under heavy scrutiny. If middle school athletics for females are worthwhile, then sound evaluations of the potential benefits of these programs are necessary to meet the challenge of accountability issued by those directly responsible. The far reaching implications of improved self-concept on educational success mandate that self-concept research is essential in determining the worth of

the athletic program aspect of the educational curriculum.

This study is viewed as one of several investigations directed to thoroughly evaluate urban athletic programs designed for girls at the middle school level. A preponderance of research on the relationship of school activities, and particularly athletics, has been done at the high school level but little research has been done at the middle school level. This study is designed to provide additional insight into the effects athletic competition may have on female middle school athletics.

Hypotheses

The specific purpose of this study is to test three hypotheses:

1. There is no significant difference in self-concept of seventh grade female students in urban middle schools choosing to participate in interscholastic athletic programs and seventh grade female students in urban middle schools choosing not to participate in interscholastic athletic programs as measured by the Piers-Harris Children's Self-Concept Scale.
2. There is no significant difference in daily school attendance of seventh grade female students in urban middle schools choosing to participate in interscholastic athletic programs and seventh grade female students in urban middle schools choosing not to participate in interscholastic athletic programs as measured by school attendance records.

3. There is no significant difference in grade point average of seventh grade female students in urban middle schools choosing to participate in interscholastic athletic programs and seventh grade female students in urban middle schools choosing not to participate in interscholastic athletic programs as measured by final nine week grading reports.

Research Questions

The specific questions studied are as follows:

1. Are there differences in the self-concept of female seventh grade students in urban schools choosing not to participate in interscholastic sports with those female seventh grade students in urban schools choosing to participate in one or two interscholastic sports?
2. Are there differences in the daily school attendance of female seventh grade students in urban schools choosing not to participate in interscholastic sports with those female seventh grade students in urban schools choosing to participate in one or two interscholastic sports?
3. Are there differences in the grade point average of female seventh grade students in urban schools choosing not to participate in interscholastic sports with those female seventh grade students in urban schools choosing to participate in one or two interscholastic sports?

Limitations

In this investigation, the effects of athletic

participation on self-concept, daily school attendance, and grade point average of seventh grade female students in the urban school study is limited to a sample of students from three of the six public middle schools in Chesapeake, Virginia. Specifically, the subjects are 1993-1994 seventh grade females who: (1) participated on one interscholastic athletic team, (2) participated on two interscholastic athletic teams, or (3) did not participate on any interscholastic athletic teams.

The study is designed to measure self-concept, daily school attendance, and grade point average during periods of participation and non-participation. The self-concept factor is comprised of six identified dimensions. The study is not intended to include the long-term impact of athletic participation upon self-concept, daily school attendance, or grade point average.

The use of self-report inventories is debatable due to validity and reliability factors. In using and interpreting self-report inventories, researchers must use caution. Self-report responses have several important concerns: (1) subjects tend to select answers that they wish to reveal to the researcher; (2) subjects can report attitudes or perceptions that they do not necessary have; and (3) subjects' responses may be limited because of weak reading or language skills (Wylie, 1979). To assist in controlling for these validity concerns, Piers created two validity

checks in the scoring process of the Piers-Harris Children's Self-Concept Inventory. Both of these validity checks will be used in the scoring.

Definitions and Terms

To provide a clear understanding of the meaning of certain terms used in this study, the following definitions are offered.

Anxiety: Worry or uneasiness about what may happen.

Behavior: The manner in which an individual acts or reacts.

Daily School Attendance: Bodily presence at school as recorded and maintained by the school attendance clerk.

Grade Point Average (GPA): A measure of mean scholastic achievement in all school subjects taken by a student during a certain term. For this study grade values are as follows: A= 4.0, B= 3.0, C= 2.0, D= 1.0, and E= 0.0.

Happiness and Satisfaction: Degree to which one fulfills his own needs and is pleased with one's self (Piers, 1984).

Holding Power: The ability to keep students in continual enrollment in school until graduation.

Intellectual and School Status: The degree to which one values one's intelligence and school status.

Interscholastic sport/s: Organized and sanctioned competitive school athletic teams with scheduled contests against other organized competitive school athletic teams.

One-sport participant: A member of one of the following school-sponsored athletic teams: volleyball, basketball,

gymnastics, cheerleading, track and field.

Physical Appearance and Attributes: Visual characteristics or quality of a person.

Popularity: A state of being liked by others.

Self-Concept: Those parts of a phenomenal field of study which the individual has formed through experiences and interpretation of one's environment. For the purpose of this study, these parts are the six dimensions described by Piers and Harris (1984).

Self-Esteem: Used interchangeably with self-concept. See definition for self-concept.

Team membership: Actual participation on a school team determined by sports eligibility.

Two-sport participant: A member on two of the following school-sponsored athletic teams: volleyball, basketball, gymnastics, cheerleading, track and field.

Urban: Pertaining to the city environment.

Urban School: Any school within the city limits which shares the following three characteristics: 1) disruptive students, 2) uncooperative parents, and 3) overcrowded school facilities (Chubb & Moe, 1990).

Chapter II

REVIEW OF THE RELATED LITERATURE

An overview of the related literature pertaining to the effects of athletic participation on self-concept, daily school attendance, and grade point average of female seventh grade students in urban schools is described below.

The passage of Title IX of the Civil Rights Act in 1972 highlighted the importance of gender issues in sports (Horn, 1992). Prior to 1980, research on the effects of athletic participation centered primarily on male populations, with greater focus on female participation occurring later in the same decade. Moreover, research conducted by the Wellesley College for Research on Women strongly confirmed a void in the research related to girls' participation in athletics, especially at the middle school level (AAUW, 1992).

Athletic Participation and Self-Concept

Research studies testing the causal effect of exercise on self-concept concludes improved self-concept scores with participation in exercise programs (Sonstroem and Morgan, 1988). Sonstroem (1992) notes that self-concept definition as proposed in literature has been varied and incomplete. Early formations of self-concept tend to emphasize global parameters with the ability to interact and influence behavior. Current studies emphasize multiple components of the self (Sonstroem and Morgan, 1988). Generally, self-concept is thought to encompass (1) behavior, (2) intellectual and school status, (3) physical appearance

and attributes, (4) anxiety, (5) popularity, and (6) happiness and satisfaction (Piers, 1984; Wylie 1974).

A positive association between self-concept, grades, and athletic participation is confirmed with the results of the Schafer-Armer study (cited in Rehberg, 1969). Rehberg (1969) presented the idea that self-concept was one of many variables that affects athletic participation and educational pursuits. The relationship between athletic participation and educational pursuits may result from other related educational experiences and not necessarily from the association of education with athletics. The idea that self-concept variables are antecedents to other related variables was supported by Shavelson, Hubner, and Stanton (1976). Their study concludes that self-concept is critical in educational evaluation and research, whether used as a discrete outcome or as a moderator variable helping to explain achievement outcomes.

Self-concept studies provide important insights into the many factors that motivate students and enhance students' self-concept. R.E. Phillips (1979) studied 199 Michigan high school students to determine the relationship between activities participation (i.e., athletics, clubs, band) and self-concept. Results indicate activities' participation is significantly related to self-concept for boys but not for girls. Also, it was hypothesized that non-participating students would have a lower score on self-

concept than participating students. No evidence, however, was found to support this hypothesis. Phillips (1979) concluded that variables other than activity programs are responsible for the development of self-concept.

Monseau (1977) found no significant difference in the self-concept of junior high school students as a result of athletic participation. Although the self-concept results were not significant, Monseau did find a positive shift in self-concept for the junior high students participating in athletics. Further investigation of the relationship of athletic participation and self-concept was recommended.

Taking issue with the findings of Phillips (1979) and Monseau (1977), Yarworth and Gauthier (1978) found significant differences in the total self-concept scores among high school boy and girl activity participants as opposed to non-participants. The investigation viewed four separate measures of self-concept and utilized regression analysis for comparison. Each self-concept parameter was evaluated individually and interactively with the other self-concept measures. This information provided encouragement for further exploration into the benefits of student participation in extracurricular activities. Findings by Yarworth and Gauthier (1978), which revealed a significant difference in the total self-concept scores among high school activity participants and non-participants, provided data related to self-concept

dimensions that can significantly assess the success or failure of school activity programs.

In contrast to studies investigating general athletic participation, Weishaupt (1977) analyzed the relationship between one season of interscholastic basketball competition and self-concept of high school girls. Results indicate that (1) one basketball season did not significantly affect the self-concept of the basketball players; (2) the season did not affect regular or substitute players differently; and (3) no significant relationship was found between the number of victories or the number of competitive seasons and change in self-concept.

Snyder and Kivlin (1975) reported female athletes possess a more positive self-concept relative to psychological well-being and body-image than do non-athletes. Snyder and Sperityer (1978) found that athletes generally possessed better attitudes toward themselves and were more satisfied with life than are non-athletes. In a study of 582 eighth and ninth grade female students, Nicholson (1979) found ambition, competition, strength, and speed more prevalent among athletic participants than non-participants. These findings suggest a convergence of self-perceptions of male and female athletes with extended female involvement in athletics. Participants and non-participants were similar in their orientation toward winning but there were more participants than non-participants who stressed

the importance of playing.

Nicholson (1979) found that attributes associated with the athletic role are already apparent by early adolescence. This factor may explain why some studies of high school students do not indicate a significant change in self-concept. Attributes associated with the athletic role began developing during the middle school years and the high school studies were conducted after the significant portion of the change had occurred.

Puckett and Ford (1981) used the Piers-Harris Children's Self Concept Scale to measure the self-concept of third and fourth grade boys before and after participation in five-week team sports and of non-participants in five-week team sports. Differences were discovered in the athletic participants' total self-concept. No significant difference was found in the non-participants' total self-concept. An evaluation of the six dimensions disclosed that participants scored significantly higher than non-participants in four areas: (1) behavior, (2) intellectual and school status, (3) physical appearance and attributes, and (4) anxiety. No significant difference was found in the self-concept dimensions of popularity and happiness and satisfaction.

Hines and Groves (1989) studied 201 basketball players to examine the effect of competition upon the development of self-esteem. Using the Coopersmith Self-Esteem Inventory

(CSEI), they found a significant difference in the social attributes dimension of self-concept. Social approval and acceptance were the most important reasons for athletic participation. This result differed from the findings of Kane (1972) who found the acquisition of motor skills more important than social acceptance for male athletic participants.

More recently, the social attribute of self-concept of high school students was further studied by Chase and Dummer (1992). Results indicated that superior athletic performance is not an important criterion for female social status. Leadership activities is the important criterion for determining female social status. Chase and Dummer (1992) suggested further investigation to examine the criteria used by children to determine social status. Findings should provide educators with additional information concerning the developmental aspects of social status and self-concept.

Using data from the National Longitudinal Study of the Senior Class of 1972, Hanks (1979) studied three areas regarding athletic participation: 1) high school athletic participation for educational expectations and attainments; (2) evaluation of self-esteem as an intervening variable; and (3) identification of race and sex differences in educational attainment for high school athletes. Hanks (1979) found a consistent positive association between

athletic participation and self-esteem. The association is greater for males than for females. This finding suggests that athletics is still predominantly a male domain (Hanks, 1979). Hanks (1979) concluded that athletic participation is clearly more important for males than females. An examination of females participating in athletics today would probably result in different findings from Hanks' as to the importance of athletic participation relating to females (AAUW, 1992).

Hall, Durborow, and Progen (1986) and Butcher (1989), conclude that female athletes represent androgynous, high achieving individuals with high self-esteem. It still remains uncertain whether androgynous females may be attracted to competition or whether competition develops androgynous traits in its participants. Regardless of this uncertainty, females who make serious commitments to athletic participation are more likely to possess androgynous attributes without any serious deficit to their femininity or to their self-concept (Hall et al., 1986).

Butcher (1989) further concluded that girls involved in sport and those with high self-esteem have greater masculine sex role orientations at age 11 and remain so through age 15. Butcher (1979) also supported findings that individual differences in self-concept and sex role are evident at an early age. Individual differences typically develop concurrently and prior to adolescence.

Hanks' (1979) findings on the senior class of 1972 established a foundation for the development of educational benefits of Title IX of the 1972 Civil Rights Act pertaining to school athletics. Until this time, interscholastic athletic programs were organized and conducted for the benefit of male students. As a result, reorganization and other procedures were altered to become equally directed toward females. Additional studies are recommended to confirm or deny the findings of Hanks (1979) on the importance of male and female athletic programs.

More recent studies by Sonstroem (1989), Black (1991), and Eccles (1991) support the idea that participation in school athletic programs positively affects self-concept by fostering an environment in which individuals are respected and valued (Black, 1991). A positive self-concept develops from working with the whole child and is teachable in the same way as punctuality or honesty (Black, 1991). The enhancement of self-concept represents primary focus in growth and development and is inversely related to the anxiety dimension of low self-esteem (Sonstroem, 1988).

Some researchers (Hines & Groves, 1989; Smoll & Smith, 1981) suggest the existence of coaching influence in developing the positive self-concept of the sport participant. Smoll and Smith (1981) conducted a study of the coaching effect on Little League Baseball players. An experimental group of coaches were exposed to a preseason

training program designed to assist coaches in relating to children. The trained coaches were observed to provide more positive verbal and physical support and were less punitive than were the coaches not receiving training. A review of the won-lost records of teams coached by the trained coaches verses the won-lost records of the untrained coaches were very similar. The trained coaches were held in higher esteem and were rated as better teachers of baseball skills. The players on the teams of the trained coaches liked their teammates more than did the players on the teams of the untrained coaches. The baseball players on the trained coaches' teams exhibited a significant increase in self-concept as compared with a measurement taken one year earlier. The baseball players on the untrained coaches' teams did not experience a significant increase in self-concept. The greatest difference in the attitudes of the baseball players toward coaches was found in those children who started with lower self-concept.

According to Smoll and Smith (1981) and Hines and Groves (1989), the relationship with a coach may become highly significant and influential especially during developmental periods. The manner in which coaches relate to the players may markedly influence the outcome of the participants' self-concept. Hines and Groves (1989) advanced the hypothesis that a coach's perception of an individual's ability and the individual's reason for

participation are positively related to self-esteem.

Further, sports participants with lower ability, as assessed by the coach, have a higher degree of anxiety and the reason for athletic participation is directly related to a nonskill factor (i.e., enjoyment, energy). The structure of an athletic program and its goal priorities establish boundaries of operation for the coach.

Explanations concerning differences in self-concept as related to gender and grade level are offered by Osborne and LeGette (1982). In this study, females scored significantly higher on the Behavior and Social Self Scales while males scored higher on the Anxiety Scale. Seventh grade students are more likely to focus on social status and physical development than the upper grade students. Upper grade students, however, note greater confidence and higher self-esteem than do the seventh grade students. According to Chase and Dummer (1992), females place a greater importance on appearance with each higher grade level.

A longitudinal study by Lerner and Sorell (1981) indicates that self-esteem of males and females does not differ significantly over a period of five years. Males and females significantly differed in this study in that females consistently rated themselves closer to the masculine end of the masculine-feminine scale. Lerner and Sorell (1981) suggest that the subjects maintained a sex-role stereotype which identifies males as masculine oriented and females as

social oriented. These findings are supported by Butcher (1989) and Hall et al. (1986).

Grabe (1981) investigated the effects of school size upon successful participation in school activities and feelings of personal worth. Student alienation and self-concept were used as dependent measures. Grabe (1981) concluded: (1) A relationship exists between self-perception and the student's success in school activities; (2) When peer expectations are most demanding, success or failure in school is most predictive of student self-concept; (3) The average alienation scores of students attending small schools is significantly greater than those of scores for students attending large schools; (4) The alienation score may reflect the school's success in providing each student with some activity that is personally relevant; and (5) Self-concept results may indicate positive impact of the small school student's expected involvement in a greater diversity of activities.

The type of school, (K-8, junior high school, or middle school) coupled with the timing of the transition from one school to another is particularly important for females. Simmons and Blyth (1987) note that the self-esteem of females benefits if there is only one transition at the end of eighth grade rather than two changes: first, from elementary to middle or junior high school, and second, from middle or junior high school to high school.

Athletic Participation and Daily School Attendance

Despite the continued social criticism of athletics, research (Coleman, 1965; Landers & Landers, 1978) supports the positive benefits of interscholastic athletics. Students who participate in athletics are more likely to remain in school. Landers and Landers (1978) concluded the benefits associated with interscholastic athletics and hypothesized that dropout rate would increase without athletic programs. These results examined data over ten years and reaffirmed the 1968 Schafer-Armer investigation citing the dropout rate for non-athletes at four times that of athletes (Rehberg, 1969).

Cowden (1986) investigated 215 Michigan female athletes for a period of five years (1978-1982). Utilizing an experimental group of varsity athletes and a control group of non-athletes, Cowden (1986) indicated that female interscholastic sport participants have significantly better attendance records, significantly higher grade point averages, and are significantly more likely to enroll in college preparatory classes.

Erwin (1979) surveyed 24 schools from 14 selected school districts located in seven different sections of the country regarding 1977-78 enrollments. The average enrollment for each of the schools exceeded 1,800 students with an average dropout rate of 5.5 percent. In this survey of over 45,000 students, Erwin (1979) found that only four

percent of the dropouts are involved in activities' programs (i.e., athletics, clubs, band). Seven of the 24 schools reported that all of their dropouts were non-activity participants.

Other research (Rehberg, 1969; Snyder, 1978; Spreitzer & Pugh, 1973) reports better attendance for activity participants than non-participants. Becher (1974) found no significant difference in attendance by athletes during the sport season when compared to their off-season. Different team membership had no bearing on the findings. Results strongly suggest that non-athletes are absent from school to a significantly greater degree than are athletes.

Most states utilize a state organization to oversee their interscholastic activities (e.g., athletics, forensics, debate, cheerleading). Each public school within the state must adhere to the state organization's guidelines to participate in sanctioned activities. A key guideline related to eligibility is that of daily school attendance. Participants must maintain satisfactory daily school attendance in accordance with acceptable attendance standards established by each district. States with attendance rules encourage student athletes to either attend class or lose eligibility (VHSL, 1993).

Many individual coaches, schools, and districts have strict attendance policies which require the student-athlete to attend school and practice or lose playing time, position

and/or membership on the team. Strict attendance policies should therefore be a factor in athletes having better daily school attendance than non-athletes, although no literature was found to support this contention.

Since non-attendance of public school is not a legal option in most states for middle school students due to age requirements, most school dropout studies have been conducted at the high school level. It logically follows that attendance is also an applicable measure for the middle school student. If the benefits of athletics is a real phenomenon, one would expect better school attendance during periods of athletic participation.

Athletic Participation and Educational Attainment

For students to achieve success they must be reasonably successful in academics and participate in school activities (Havinghurst & Tabas, 1949). This belief stimulated many investigations (Becher, 1974; Coleman, 1965; Wiggins, 1987) and has been supported by most researchers (Braddock, 1981; Hanks, 1979; Rehberg, 1969). Earlier research conducted in the nineteen fifties and sixties attempted to establish a relationship between participation in school activities (i.e., band, chorus, clubs, athletics) and academic achievement as determined by grade point average. Frederick (1979) found students who participated in school activities have the highest grades in academic studies.

Hanks (1979) indicated consistent empirical evidence of

the positive link between participation in high school activities and educational expectations and attainments. Eidsmore (1963), Rehberg (1969), Spady (1970), and Cowden (1986) each observed significant positive relationships between participation in athletics and academic achievement. Eidsmore (1963) found that the grade point average of 592 high school football players is significantly higher (2.523) when compared to non-participants (2.085). Rehberg (1969) reported the 1968 Schafer-Armer study with similar findings in their study of 585 boys; athletes had a 2.35 grade point average as compared to 1.83 for the non-athletes. The Schafer-Armer study (cited in Rehberg, 1969) controlled for five variables: (1) year in school, (2) measured intelligence, (3) occupation of father, (4) previous grade point average, and (5) curriculum.

Cowden (1986) investigated 215 female subjects over a five year period (1978-1982) and concluded that female athletes have significantly higher grade point averages than the female non-athletes. Furthermore, athletic participation greatly influences the student-athletes' attendance, desire to enroll in college preparatory courses, and to seek higher educational opportunities. Rehberg (1969) expressed concern regarding the findings on the positive relationship between athletic participation and grades. Results indicated differences may develop due to intellectually superior students participating in athletics. The Schafer-Armer

study (cited in Rehberg, 1969) controlled for previous grade point averages and measured intelligence thereby raising a serious rebuttal to disputing Rehbergs' (1969) hypothesis that athletes are more intelligent than non-athletes. Rehberg (1969) suggested the existence of other variables which might account for the differences in academic achievement. Most of these variables are related to the extra opportunities afforded athletes to receive additional scholastic and career counseling along with the superior quantity and quality of encouragement. Other variables considered include the transfer effect of persistence, self-improvement, preparation, and hard work required for athletic competition.

Conversely, Bechers' (1974) study on the effects of interscholastic athletics on the achievement and behavior of eighth grade students found no significant difference between the scholastic ability of athletes and non-athletes as measured by the Iowa Test of Basic Skills. Further, no difference was found in the grades of athletes during their sport season as opposed to their non-sport season. A comparative analysis of the grades of athletes participating in different sports (i.e., football, basketball, baseball) revealed no significant difference in the grades.

McPherson (1980) suggests that non-athletes perform better in academic work than athletes. McPherson (1980) also held that recent evidence indicates athletes to have

slightly higher grade point averages than do non-athletes. These investigations, however, suggest that a major limitation in recent studies is little statistical data to prove or disprove the existence of intervening variables which may account for the athletes achieving better grades.

A positive significant association between athletic participation, high school grades, and self-esteem for white and black males was reported by Braddock (1981). Results are consistent with those of others (Phillips, 1979; Rehberg & Schafer, 1967) who linked academic achievement with athletic participation. Braddock's (1981) findings are important as they disproved popular opinions which existed at that time. Black athletes were similarly affected by athletic participation. Braddock's (1981) results supported positive academic achievement attainment regardless of race or ethnicity.

Marsh (1993) conducted a study on the self-concepts of physical fitness and academic achievement for a large national representative sample of boys and girls aged 9 to 15. Correlations between self-concepts and external criteria increases steadily with age in both the physical and academic domains. After controlling for gender and age, Marsh (1993) revealed that academic achievement is nearly uncorrelated with general and nonacademic domains but is substantially related to academic self-concept. As a student grows older, the dimensions of self-concept become

less correlated and are found more predictably from external criteria and from the evaluation of significant others (teacher, parents, peers). In Marsh's (1990, 1991, 1993) longitudinal studies, academic self-concept was found contributing to subsequent school grades beyond standardized testing and prior school grades. This suggests that academic self-concept is causally related to academic achievement. Marsh (1993) also emphasized the importance of a positive self-concept relationship to other academic outcomes, to include study-time and course selection.

Weiss et al. (1990) concluded that high and low self-esteem children differ in attributions for academic situation, with the most pronounced effects occurring in the social domain (peer relations) and the least in the academic domain. Athletes fell between the two domains. These findings were attributed to how high and low esteemed children view themselves. High esteemed children often rate themselves more successful and to have more positive expectations for sport achievement (Weiss et al., 1990).

Promoting academic achievement through sports (PASS) has become a project of the American Sports Institute (ASI) (Griffin, 1992). In its third year of operation at McAteer High School, San Francisco, California PASS sponsors found the typical enrollees include those student athletes whose academic performance is deficient or those whose for whom attendance has been a problem. The coeducational program

has yielded positive results in improving grades and attendance. According to the sponsors, success is due to the ability of athletic and classroom participation to raise the student's self-concept while stressing, among others, the fundamentals of athletic mastery of concentration, balance, power, and attitude (Griffin, 1992).

The importance of a positive self-concept can not be over-emphasized (Bloom, 1977; Clemes & Bean, 1981; Wiggins, 1987, in press). Despite the use of different instruments and different stated goals, the results of numerous investigations are similar; self-concept appears directly related to school performance. Clemes and Bean (1981) further concluded that children with high positive self-esteem have fewer incidents of inappropriate behavior, assume responsibility, endure greater frustrations, and are usually satisfied with their deeds. Children with low self-concept are easily led by others, become frustrated more often, tend to rationalize blame onto others, and tend to avoid challenging situations. Wiggins (1987) found that self-esteem scores were the only factor significantly correlated with earned grades for 483 student in grades four through twelve. Kifer (1973) found a significant correlation between self-esteem scores and academic grades for seventh grade students.

Piers-Harris Children's Self-Concept Scale and Self-Concept

The Piers-Harris Children's Self-Concept Scale

Inventory (PHCSCSI) assimilates a global design and is reported to: (1) measure different dimensions of self-concept; (2) comply with short administration times with a minimum of instruction; (3) control for acquiescence response; and (4) have simplified interpretations (Wylie, 1974).

Research related to the reliability of the PHCSCSI supports high coefficients between the test and self-concept (see Table 1). Important to this investigation is the interval between administration of the pretest and the post-test. Shavelson and Bolus (1982) used a test-retest interval of five months and obtained reliability coefficients of .81 for seventh and eighth grade boys and girls (Piers, 1984). Periods of test-retest beyond five months show a decline in reliability (Piers, 1984).

Because children are less knowledgeable about any benefits that might accrue as a result of presenting an unfavorable picture of themselves, low scores on the PHCSCSI are relatively rare. High scores on the inventory may or may not reflect truly positive self-attitudes; low scores generally reflect negative self-attitude (Piers, 1984).

During the last decade, increased attention has focused upon the acquiescence on standardized test, (i.e., tendency to say "yes" or "no" to all or almost all of the items) which use responses of "yes" or "no" as alternatives. Although one researcher (Roer, 1955) reports that

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Table 1

Piers-Harris Children's Self-Concept InventoryTest/Retest Reliabilities

Study	Sample	Age/Grade	N	Interval	r
Piers-Harris 1964	Public schools	3 gd.	56	4 mos.	.72
		6 gd.	66	4 mos.	.71
		10 gd.	60	4 mos.	.72
Querry 1970	L.D. speech	6 gd.	30	2 mos.	.96
Crandal 1973	Public schools	3 gd.		4 mos.	.90
Lefley 1974	Ethnically diverse	7-14 yr.	40	10 wks.	.73
Smith & Rogers 1977	L.D.	6-12 yr.	89	6 mos.	.62
Shavelson & Bolus 1982	Public schools	7 gd.	99	5 mos.	.81

Note. Gender for all the above studies was male and female except in Crandal (1978) in which gender was only female.

acquiescence is not an important determinant of responses to personality inventories, Piers and Harris (1984) minimized this effect of biases by balancing the number of positive and negative worded items in the scale (Piers, 1984).

Therefore, the PHSCSI inventory is constructed with approximately half of the test items phrased in the direction of higher self-concept and half of the test items phrased in a lower self-concept direction. The items on the PHSCSI demonstrate face validity (Piers, 1984). (see Table 2).

Self-concept

Table 2

Piers-Harris Children's Self-Concept Inventory Validity
Coefficients

Study	Sample	Age/Grade	Sex	N	Measure	r
Piers 1965	Public schools	6 gd.	Girls	55	Teacher	.17
		6 gd.	Girls	55	Peer	.34
Mayer 1965	Sp. Ed.	12-16 yr.	Both	98	Lipsetts Children Self- Concept	.68
Cox 1966	Public schools	7-9 gd.	Both	97	SRA	.64
Cox 1966	Public schools	6-9 gd.	Both	97	Teacher	.43
		6-9 gd.	Both	97	Peer	.31

Conclusion

Self-concept, daily school attendance, and academic achievement are all important aspects of a student's total educational experience. Research and other literature related to participation in extracurricular activities, particularly among middle school students, reveals a changing status for girls in urban public school athletics. If middle school athletic programs for females are worthwhile, then the burden of justification lies with educators to present evidence of such value.

It is evident that progress is slowly being made in examining the effects of interscholastic athletic participation upon females. Since the 1972 passage of Title IX, girls' participation in athletics has increased dramatically (Messner & Sabo, 1990). However, boys' participation and attendant evaluative research is still almost twice that of girls (AAUW, 1992). Research indicates that any student, regardless of race or gender, can benefit from athletic participation (Braddock, 1981).

When research data is maintained as a comprehensive automated record, analyses and tabulations may answer gender-equity issues. Renewed interest in gender differences could further initiate changes that are required to make policy in this area and to adequately access improvements in the urban public school system.

With this in mind, it is enlivening to discover

research data which generally supports the value of athletic programs. Previously conducted gender-based research provides the basis for continued investigative studies to discover the effects, if any, of athletic participation on self-concept, daily school attendance, and the grade point average of female seventh grade students attending the urban middle school.

CHAPTER III

METHODS AND PROCEDURES

This experimental factorial study is designed to determine the effects of athletic participation on self-concept, daily school attendance, and grade point average of seventh grade female students in urban middle schools. Pretest and posttest measures contrasting with a control are the procedures utilized to determine differences between groups.

Independent Variables

For the purpose of this investigation, there are two independent variables: (1) levels of athletic participation and (2) grading periods. There are three levels of athletic participation: (a) one-sport participation; (b) two-sport participation; and (c) no-sport participation. There are three levels of grading periods: (a) 9 weeks grading period; (b) 18 weeks grading period; and (c) 27 weeks grading period.

Dependent Variables

The dependent variables are self-concept, daily school attendance, and grade point average. Self-concept is comprised of six (6) dimensions: (1) behavior, (2) intellectual and school status, (3) physical appearance and attributes, (4) anxiety, (5) popularity, and (6) happiness and satisfaction (Piers, 1984). Each dimension was measured two weeks prior to the fall sports season's opening date and again at the end of the twenty-seventh week of school.

Grades were collected at the end of three consecutive grading periods: (1) 9 weeks, (2) 18 weeks, and (3) 27 weeks. The third grading period ended two weeks after the self-concept posttest. A grade point average for each subject was obtained at the same three grading periods. Daily school attendance were also collected to coincide with the three grading periods.

Confounding Variables

The literature review addresses potential threats to generalizability: coaches' influence; team win-lose records; gender, grade level, ethnic group; school size/type; and sex role identification. Studies by Shavelson, Hubner, and Stanton (1978) concluded that self-concept is critical in educational evaluation and research whether used as a desirable outcome or as a moderator variable.

According to Hume's truism (Campbell & Stanley, 1963), generalization is never fully justified logically. Internal validity concerns are solvable within the limits of the logic of probability statistics. External validity concerns are not logically solvable conclusively (Campbell & Stanley, 1963).

To further assist in controlling for these variables, the following actions were taken:

1. The athletic coaches at the three selected middle schools are similar in coaching experience, philosophy, and

approval as required by Chesapeake Public Schools. All coaches have received coaching preparation skills.

2. A review of historical records of the three schools selected indicates that the schools are similar in female sports teams win/lose records. This year the final standings for volleyball resulted in a 1, 2, 3 finish. Basketball resulted in a 1, 3, 4 finish (win-lose records).
3. All seventh grade females in the Chesapeake Public School System received family life instruction during the course of the study (role identification).
4. The three schools selected are representative of urban schools as defined by Chubb and Moe (1990), (i.e., type of students, facilities, and parental cooperation).
5. Female students who participated in organized recreational sports programs were eliminated from the study.

The pretest-posttest control group design with random sampling controls for most threats to internal validity (Campbell & Stanley, 1963). Subject selection presents concerns as the subjects in the study are self-selected as to the level of sport participation. Specific attention was focused upon those female students who planned to participate in sports but were eliminated from athletic team membership because of the coaches' selection process for tryouts (i.e., number of allowed team members, athletic skills, coaches' philosophy). Those subjects eliminated from participation became members of the no-sport

participation group. This contributes to the control group and the experimental groups sharing the same characteristics and being representative of the population.

Subject Selection

Seventh grade female students from three of the six public middle schools in Chesapeake, Virginia were selected for participation. The three schools selected are representative of urban middle schools as defined by Chubb and Moe (1990). Urban schools have three basic characteristics: (1) disruptive students, (2) uncooperative parents, and (3) overcrowded facilities (Chubb & Moe, 1990). A review of the socio-economical data (i.e., income, housing, crime, parent membership in school organizations, and the number of students assigned to each school of the three communities) for the selected schools support these characteristics as present in each of the three schools (R. Cowden, personal communication, September 8, 1993). A review of standardized test results also supports students with varied levels of academic achievement (R. Cowden, personal communication, September 8, 1993). Combined seventh grade female enrollment for these three schools was designated at 587 (R. Cowden, personal communication, September 8, 1993). Each of the 587 were asked to categorize themselves by indicating plans to participate or not to participate in the athletic seasons of the school term. Verification of student participation was determined.

second week of the fall and winter sport season from a certified student eligibility list.

Twenty-four seventh grade female students were randomly selected to fill each of the following categories: (1) those participating in one sport; (2) those participating in two sports; and (3) those not participating in any school sports. Parental consent forms were obtained for 523 projected participants. The number of those actually participating (471) was less than the number approved. Some subjects were absent during the testing sessions and some subjects did not follow testing procedures. The size and composition of the sample for each group are reported in Table 3.

There are three athletic seasons in the Chesapeake middle school athletic program to coincide with the seasons: fall, winter, and spring. The ending of fall season coincides with the end of the first nine weeks; the winter season coincides with the end of the third nine weeks; and the spring season coincides with the fourth nine weeks. To answer the questions raised in the statement of the problem, it was necessary to utilize the first three grading periods of the school year. It was made possible to study differences, if any, in self-concept, daily school attendance, and grade point average relative to: (1) participation in one sport, fall or winter; (2) participation in two sports, both fall and winter; and (3) non-participation in any sports.

Self-concept

Table 3

Size and Composition of Sample Groups

School	Projected/Actual No. of participants			
	No. Students	1 Sport	2 Sport	0 Sport
Deep Creek Middle School	209/183	31/13	15/8	137/162
Truitt Middle School	142/130	29/15	12/8	89/107
Western Branch Middle School	236/190	38/14	27/10	125/166
Total	587/503	98/42	54/26	351/435

Note. The following were eliminated from the study:

- (1) 25 seventh grade repeaters; (2) 10 severely disabled subjects; (3) 20 subjects who wanted to participate in school athletic programs but were eliminated by the coach after tryouts and participated in recreational sports; and (4) 29 students who failed to complete the testing procedures correctly.

Instrumentation

The Piers-Harris Children's Self-Concept Scale Inventory (PHCSCSI) was selected because it involves a global design and is characterized to: (1) measure several facets of self-concept; (2) be administered in a short period of time with a minimum of instruction; (3) control for acquiescence response; and (4) have simplified interpretations (Wylie, 1974).

Data analysis of the PHCSCI is possible in the following six dimensions of self-concept: (1) behavior, (2) intellectual and school status, (3) physical appearance and attributes, (4) anxiety, (5) popularity, and (6) happiness and satisfaction. The sums of the items answered in a given direction for each factor can be calculated to obtain a cluster score.

Each subject completed a brief questionnaire on level of participation in interscholastic and recreational sports activities (see Appendix A).

Testing Procedures

Consent to conduct this study was granted by the Office of Testing, Research, and Student Affairs, Chesapeake Public Schools, Chesapeake, Virginia (see Appendix B). Additional consent was obtained from each of the building principals of Deep Creek Middle School, Truitt Middle School, and Western Branch Middle School (see Appendix C). A conference was held with each of the teachers selected to administer the

PHCSCSI. All female students enrolled in seventh grade Health and Physical Education classes for the 1993-1994 school year were tested. Female students who repeated the seventh grade and female students who are severely physically handicapped were eliminated from the study. Parental consent forms for participation in the study was obtained from 523 of the projected 587 subjects (see Appendix D).

The PHCSCSI (see Appendix E) was administered to 503 subjects during health classes. The results of this test served as pretest data. The PHCSCSI was administered a second time at the end of the 27-week grading period. The results of this test served as posttest data. Students who were absent or failed to complete the testing procedures correctly were eliminated.

Seventh grade females participating in interscholastic athletics during the 1993-1994 school year were verified at the second week of practice of each sport season. Official sports eligibility lists were used for verification of sport participation. Pretest results for each of the student athletes were categorized for post testing purposes. Random samples were drawn after the posttest for each of the three categories. Each category was composed of 24 subjects. Scores for each of the six component dimensions of self-concept were totaled for a cluster score.

Grades were collected at the end of three consecutive

grading periods: (1) 9 weeks, (2) 18 weeks, and (3) 27 weeks. The third grading period ended one week after the posttest. A grade point average for each subject was obtained at the same three grading periods: A=4.0, B=3.0, C=2.0, D=1.0 and E=0.0.

Daily school attendance records were maintained by the school attendance clerk for the entire student body. Each month, the attendance clerk accounted for each student's daily attendance and reported the attendance to the Virginia State Department of Education. A monthly report was available for each month of the school year. For the purpose of this study, the selected seventh grade female subjects school attendance daily reports were collected to coincide with the grading periods of (1) 9 weeks, (2) 18 weeks, and (3) 27 weeks. This enabled the same frequency of data for attendance as for grades (see Table 4).

Each subject completed a brief questionnaire on level of participation in interscholastic and recreational sports activities. Twenty subjects who participated in community recreational athletic programs were eliminated from the study.

Statistical Analysis

The data from the PHCSCSI, daily school attendance, and grade point average were collected and recorded for processing. The self-concept score was analyzed as a cluster score along with each of the six respective

Self-Concept

Table 4

Schematic Representation of Timeline Data Collection

Group	Measures				
	Pretest	9 wks	18 wks	27 wks	Posttest
One sport	PHCSCSI	Att. GPA	Att. GPA	Att. GPA	PHCSCSI
Two sport	PHCSCSI	Att. GPA	Att. GPA	Att. GPA	PHCSCSI
No sport	PHCSCSI	Att. GPA	Att. GPA	Att. GPA	PHCSCSI

Note. (1) Twenty-four subjects were randomly selected from each group for statistical analysis.

(2) Subjects repeating seventh grade and severely handicapped subjects were eliminated at the onset of the study. (3) Subjects participating in recreational sports programs were eliminated from the study after the posttest.

component dimensions. Level of statistical significance for establishing differences between groups was $p < .05$.

Two separate 3 X 3 factorial analyses of variance (ANOVAS) were conducted to determine differences between the three levels of athletic participation with that of the three grading periods for both daily school attendance and grade point average. Tukey's post hoc tests were incorporated when a significant F was demonstrated. Alpha was set at $p < .05$.

A 2 X 3 multivariate analysis of variance (MANOVA) was conducted to determine differences in self-concept associated with the levels of athletic and non-athletic participation with that of the pre- and post-treatment test periods. Tukey's post hoc tests were incorporated when a significant F was demonstrated. Alpha was set at $p < .05$.

The findings are presented to address the stated research questions relating to the major topics of self-concept, daily school attendance, and grade point average.

Chapter IV

ANALYSIS OF DATA

The problems addressed in this study focused on whether or not differences exist in self-concept, daily school attendance, and grade point average between female seventh grade students in urban schools choosing to participate in one or two interscholastic sports and those female seventh grade students in urban schools choosing not to participate in interscholastic sports.

Findings Regarding Self-concept

Six dimensions of the Piers-Harris Children's Self-Concept Scale Inventory (PHCSCSI) (1984) and self-concept total are presented. A 2 X 3 multivariate analysis of variance (MANOVA) examined differences associated with self-concept prior to and following the participation or non-participation of one or two middle school interscholastic sports. Means and standard deviations for each of the two tests are presented in Tables 5 and 6. Factorial analysis of variance (ANOVA) for the six dimensions of self-concept and self-concept total are presented in Tables 7 through 13.

Statistical differences (Wilks' lambda, $F(14,264)=3.35$; $p < .0001$) were demonstrated between subjects choosing to participate in one or two interscholastic sports and those subjects choosing not to participate. Factorial ANOVA's noted statistical differences ($p < .05$) in intellectual and school status (see Table 8), physical appearance and attributes (see Table 9), anxiety (see Table 10), and

popularity (see Table 11). No differences were found in behavior (see Table 7), happiness and satisfaction (see Table 12), or total self-concept (see Table 13).

Students participating in one or two sports demonstrated higher scores on intellectual and school status than those who chose not to participate in sports (Tukey, $p < 0.05$). No differences were found between one- and two-sport participants (see Table 8).

One- and two-sport participants demonstrated higher scores on physical appearance than no-sport participants (Tukey, $p < 0.05$). No significant differences were found between one- and two-sport participants (see Table 9).

Two-sport participants noted lower anxiety scores than no-sport participants (Tukey, $p < 0.05$). No significant differences were noted between one- and two-sport participants (see Table 10).

Two-sport participants noted lower scores on popularity than no-sport participants (Tukey, $p < 0.05$). No significant differences were noted between one-sport participants and two-sport participants (see Table 11).

Self-concept

Table 5

Pretest Means and Standard Deviations for Piers-Harris Self-Concept Dimensions

Dimension		Level of sport participation		
		0	1	2
B	<u>M</u>	5.83333	5.45833	5.70833
	<u>SD</u>	1.90347	1.79320	2.27423
ISS	<u>M</u>	9.79166	11.25000	10.79166
	<u>SD</u>	2.30272	1.72576	1.35066
PAA	<u>M</u>	7.16666	8.75000	9.58333
	<u>SD</u>	2.40771	3.44207	1.99819
A	<u>M</u>	6.20833	4.83333	4.75000
	<u>SD</u>	2.87386	3.30568	3.06807
P	<u>M</u>	5.04166	4.33333	4.12500
	<u>SD</u>	1.60106	1.71100	1.80127
HS	<u>M</u>	6.83333	6.16667	6.66667
	<u>SD</u>	1.34056	1.16718	1.23945
TSC	<u>M</u>	38.75000	39.20833	39.08303
	<u>SD</u>	5.74267	3.97797	5.64082

Note. (1) B = Behavior; (2) ISS = Intellectual and School Status; (3) PAA = Physical Appearance and Attributes; (4) A = Anxiety; (5) P = Popularity; (6) HS = Happiness and Satisfaction; (7) TSC = Total Self-concept.

n = 24 for all groups.

Self-concept

Table 6

Posttest Means and Standard Deviations for Piers-Harris
Self-Concept Dimensions

Dimension		Level of sport participation		
		0	1	2
B	<u>M</u>	6.04166	6.50000	5.41667
	<u>SD</u>	2.38617	2.14679	1.44212
ISS	<u>M</u>	9.25000	11.12500	11.04167
	<u>SD</u>	2.59179	1.91816	1.80529
PAA	<u>M</u>	7.41666	9.62500	9.58333
	<u>SD</u>	2.79622	2.31840	2.26345
A	<u>M</u>	6.37500	4.75000	4.79167
	<u>SD</u>	3.18710	2.83227	3.36192
P	<u>M</u>	4.91666	4.37500	4.08333
	<u>SD</u>	1.69184	1.49819	1.83958
HS	<u>M</u>	6.41666	6.70833	6.83333
	<u>SD</u>	1.50120	1.30148	1.46456
TSC	<u>M</u>	37.70833	41.54167	38.70833
	<u>SD</u>	6.08975	3.17571	5.30364

Note. (1) B = Behavior; (2) ISS = Intellectual and School Status; (3) PAA = Physical Appearance and Attributes; (4) A = Anxiety; (5) P = Popularity; (6) HS = Happiness and Satisfaction; (7) TSC = Total Self-concept.

n = 24 for all groups.

Self-concept

Table 7

2 X 3 Factorial Analysis of Variance for Piers-Harris Self-
Concept: Behavior Dimension

Source	ss	df	ms	f	p
Model	19.61805	5	3.92361	0.97	0.4415
Error	561.04167	138	4.06552		
Total	580.65972	143			
Group	5.05556	2	2.52778	0.62	0.5385
Session	3.6736	1	3.6736	0.90	0.3435
G*S	10.88889	2	5.4444	1.34	0.2654

Note. G*S = Group by Session.

p = @ $p < 0.05$.

Self-concept

Table 8

2 X 3 Factorial Analysis of Variance for Piers-Harris Self-Concept: Intellectual and School Status Dimension

Source	ss	df	ms	f	p
Model	81.25000	5	16.25000	4.10	0.0017
Error	546.50000	138	3.96025		
Total	627.75000	143			
Group	76.79167	2	38.39583	9.70	0.0001*
Session	0.69444	1	0.06944	0.18	0.6760
G*S	3.76389	2	1.88194	0.48	0.6228

Note. G*S = Group by Session.

*p = @ p< 0.05.

Self-concept

Table 9

2 X 3 Factorial Analysis of Variance for Piers-Harris Self-Concept: Physical Appearance and Attributes Dimension

Source	ss	df	ms	f	p
Model	153.97917	5	30.79583	4.62	0.0006
Error	918.95833	138	6.65918		
Total	1072.93750	143			
Group	144.04167	2	72.02083	10.82	0.0001*
Session	5.06250	1	5.06250	0.76	0.3848
G*S	4.87500	2	2.43750	0.37	0.6941

Note. G*S = Group by Session

*p = @ p< 0.05.

Self-concept

Table 10

2 X 3 Factorial Analysis of Variance for Piers-Harris Self-
Concept: Anxiety Dimension

Source	ss	df	ms	f	p
Model	73.45139	5	14.69028	1.52	0.1882
Error	1335.87500	138	9.68025		
Total	1409.32639	143			
Group	73.01389	2	36.50694	3.77	0.0254*
Session	0.06250	1	0.06250	0.01	0.9361
G*S	0.37500	2	0.18750	0.02	0.9808

Note. G*S = Group by Session.

*p = @ p< 0.05.

Self-concept

Table 11

2 X 3 Factorial Analysis of Variance for Piers-Harris Self-
Concept: Popularity Dimension

Source	ss	df	ms	f	p
Model	19.72917	5	3.94583	1.37	0.2377
Error	396.20833	138	2.87107		
Total	415.93750	143			
Group	19.50000	2	9.75000	3.40	0.0363*
Session	0.06250	1	0.06250	0.02	0.8829
G*S	0.16667	2	0.08333	0.03	0.9714

Note. G*S = Group by Session.

*p = @ p < 0.05.

Self-concept

Table 12

2 X 3 Factorial Analysis of Variance for Piers-Harris Self-Concept: Happiness and Satisfaction Dimension

Source	ss	df	ms	f	p
Model	8.31250	5	1.66250	0.92	0.4671
Error	248.12500	138	1.79801		
Total	256.43750	143			
Group	2.37500	2	1.18750	0.66	0.5182
Session	0.34028	1	0.34028	0.19	0.6642
G*S	5.59722	2	2.79861	1.56	0.2146

Note. G*S = Group by Session.

p = @ p < 0.05.

Self-concept

Table 13

2 X 3 Factorial Analysis of Variance for Piers-Harris:
Total Self-Concept Dimension

Source	ss	df	ms	f	p
Model	195.83333	5	39.16667	1.51	0.1915
Error	3586.16667	138	25.98671		
Total	3782.00000	143			
Group	115.79167	2	57.89583	2.23	0.1116
Session	3.36111	1	3.36111	0.13	0.7197
G*S	76.68056	2	38.34028	1.48	0.2323

Note. G*S = Group by Session.

p = @ p< 0.05.

Findings Related to Daily School Attendance

Daily school attendance means and standard deviations are presented in Table 14. A 3 X 3 factorial analysis of variance (ANOVA) examined differences on daily school attendance between middle school seventh grade female students participating in one, two, or no interscholastic sports during three consecutive grading periods of 9, 18, and 27 weeks following sport or no sport participation (see Table 15).

The factorial ANOVA demonstrated statistical differences in the various levels of athletic participation (Tukey, $p < .0001$) and the three periods of grading ($p < .02$). Students choosing not to participate in sports noted higher levels of school absenteeism than those participating in one or two sports ($p < 0.05$). No significant differences were found between one- and two-sport participants. Daily school attendances were significantly lower for the second grading period than for the first grading period (Tukey, $p < 0.05$). No differences were noted for the first grading period and the third grading period nor for the third grading period and the second grading period. There were no statistical interactive effects between levels of athletic participation and the three grading periods.

Table 14

Means and Standard Deviations for Daily School Attendance

		Level of sport participation		
		0	1	2
DSA1	<u>M</u>	1.83333	0.83333	1.04167
	<u>SD</u>	2.53097	1.55106	2.09511
DSA2	<u>M</u>	3.33333	1.95833	1.45833
	<u>SD</u>	2.88424	2.83578	2.51913
DSA3	<u>M</u>	2.75000	1.83333	1.33333
	<u>SD</u>	2.52380	2.25864	1.40393

Note: DSA1 = Daily Attendance for 9 Weeks;

DSA2 = Daily Attendance for 18 Weeks;

DSA3 = Daily Attendance for 27 Weeks.

Means are average number of days of absences.

Self-concept

Table 15

3 X 3 Factorial Analysis of Variance for Daily School
Attendance

Source	ss	df	ms	f	p
Model	122.91667	8	15.36460	2.80	0.0057
Error	1135.04167	207	5.48338		
Total	1257.95844	215			
Group	75.02778	2	37.51389	6.84	0.0013*
Session	39.52778	2	19.76389	3.60	0.0289*
G*S	8.36111	4	2.09028	0.38	0.8219

Note. G*S = Group by Session.

*p = @ p< 0.05.

Findings Related to Grade Point Average

Grade point average means and standard deviations are presented in Table 16. A 3 X 3 factorial analysis of variance (ANOVA) examined differences on grade point averages between middle school seventh grade female students participating in one, two, or no interscholastic sports during three consecutive grading periods of 9, 18, and 27 weeks following sport or no sport participation (see Table 17).

The factorial ANOVA demonstrated statistical differences between one- and two-sport participants and no-sport participants ($p < 0.0001$). Students choosing to participate in one or two sports noted higher grade point averages than those choosing not to participate in sports (Tukey, $p < 0.05$). The two-sport participants noted higher grade point averages than the one-sport participants (Tukey, $p < 0.05$). There were no reported statistical differences between the three grading sessions nor were there any interactive effects between the sport participation groups and the grading periods.

Self-concept

Table 16

Means and Standard Deviations for Grade Point Average

Source		Level of sport participation		
		0	1	2
GPAS1	<u>M</u>	2.61583	3.10625	3.47250
	<u>SD</u>	0.81959	0.73104	0.41435
GPAS2	<u>M</u>	2.59291	2.88583	3.35250
	<u>SD</u>	0.87831	0.76814	0.42440
GPAS3	<u>M</u>	2.67459	2.95667	3.45458
	<u>SD</u>	0.84053	0.81981	0.37523

Note. GPAS1 = Grade Point Average for 9 Weeks;

GPAS2 = Grade Point Average for 18 Weeks;

GPAS3 = Grade Point Average for 27 Weeks.

Self-concept

Table 17

3 X 3 Factorial Analysis of Variance for Grade Point Average

Source	ss	df	ms	f	p
Model	23.72350	8	2.96544	6.01	0.0001
Error	102.09245	207	0.49320		
Total	125.81595	215			
Group	23.23259	2	11.61629	23.55	0.0001*
Session	0.37300	2	0.18650	0.38	0.6856
G*S	0.11791	4	0.02948	0.06	0.9933

Note. G*S = Group by Session.

*p = @ p < 0.05.

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

The integration of interscholastic athletics into the American public school system has been unique and debatable. Traditionally, the integration of interscholastic athletics into the educational system has been justified on the basis of developing sportsmanship, competitive spirit, citizenship, physical development, and other values which remain difficult to measure.

With emphasis on providing greater accountability by school administration, and critics believing interscholastic athletics unnecessary and often detrimental to the development of young people, educators must justify the resources directed toward interscholastic athletics. Some critics question the value of sportsmanship, competitive spirit, and other similar traits as vital to education as the skills in reading, writing, mathematics, and the development of scientific knowledge.

Proponents of interscholastic athletics emphasize the concrete benefits of athletic participation. Implications of a more positive self-concept are noted by some researchers (Black, 1991; Hanks, 1979; Rehberg, 1969; Sonstroem, 1989, 1990) who have attempted to investigate the relationship between self-concept and athletic participation. Some researchers (Cowden, 1986; Erwin, 1979; Landers & Landers, 1978) have alluded to the ability to improve school attendance and reduce dropout percentages

through athletic participation. Other researchers (Braddock, 1981; Coleman, 1965; Marsh, 1990, 1991, 1992; Wiggins, 1987, in press) have suggested a positive link between athletic participation and academic performance.

Previous literature is abundant with studies of the relationship between high school and college male athletes and psychological factors, school attendance, and academic performance. There is limited information related to middle school female athletes. Discussion of gender differences in sport and educational achievement stimulates disagreement. Perceptions of sex roles typically fluctuate among people of different age, race, and gender. Traditionally, boards of education often consider reducing expenditures of middle school athletic programs. If interscholastic athletic programs are beneficial to the development of the total individual, then a more concrete body of evidence of this importance needs to be established.

According to Friedland (1992), America's youth, especially those living in the urban cities, are experiencing a negative, problematic, and even neurotic society. The National Institute of Medicine (NIM) reports astonishing numbers of mental disorders, suicide rates, pregnancies, drug and alcohol abuse (Friedland, 1992). The result is not only seen in alarming death rates but also in low self-interest, low motivation, low achievement, and low self-esteem (Patton, 1981; Press, 1988). Poor self-concept

is often noted as the central cause of many of these youth problems.

Summary of the Findings: Self-Concept

The investigative outcomes of the present study noted significant differences between female seventh grade students choosing to participate in interscholastic sports and female seventh grade students choosing not to participate in interscholastic sports in four of the seven self-concept dimensions identified by Piers-Harris (1984). Sport participants reported higher intellectual and school status scores and higher physical appearance and attributes scores than the non-participants. Additionally, lower scores were reported for sport participants for anxiety and popularity. No significant differences were found in the self-concept dimensions of behavior, happiness and satisfaction, or in the total self-concept. The examination of self-concept by each of the six dimensions appears to have affected the total self-concept score. Higher scores in some dimensions of self-concept were combined with lower scores in other areas of self-concept creating a grand mean of all the self-concept scores. As a result, no significant difference in total self-concept between the sport participants and the non-participants was demonstrated. Mean score statistical regression is therefore reasoned as rational for no statistical differences in self-concept total.

Participation in middle school interscholastic athletic develop many positive traits. Researchers (Chase & Drummer, 1992) have identified some traits being important criteria for the formation of social status. Therefore, the acquisition or enhancement of these traits positively increases the intellectual and school status dimension of self-concept. Interscholastic athletic programs also foster an environment in which individuals gain respect and are valued by others.

The intellectual and school status dimension is further supported by available data on school grade point averages which noted one- and two-sport participants having higher grade point averages than no-sport participants. The differences indicate athletes are more positive of their intellectual performance than are non-sport participants. The improvement in intellectual and school status scores noted by the one- and the two-sport participants when compared with the no-sport participant suggests that increased athletic participation contributes to increased intellectual and school status.

The physical appearance and attributes results also indicated significant differences. One- and two-sport participants scored significantly higher than the no-sport participants. Greater magnitude of change was noted in the two-sport participants' scores. This suggests that students who participate in interscholastic sports improve their

physical appearance and attributes and are more aware of this improvement.

Research indicates a positive relationship exist between physical health and academic performance. The mental and physical challenges presented in interscholastic athletic programs provide participants with means to improve muscular shape and tone, increase flexibility, and strength. Each of these provide improved awareness of one's physical body and the bodies improved capabilities. This awareness is noted in the improvement of the athletic participants' self-concept scores in physical appearance and attribute dimension. Schools that offer athletic programs provide not only a healthy, constructive environment but also a means to improve physical and mental attributes.

Results related to the anxiety dimension of self-concept noted a decrease in the anxiety level of the two-sport participants as compared to the no-sport participants. No differences were noted in the anxiety levels of the one- and two-sport participants. Anxiety can be expected to be negatively correlated with positive self-concept. A decrease in the anxiety level, therefore, indicates improved self-concept. Athletic participation reduces worry or uneasiness about what may happen. Interestingly, the one- and two-sport participants means (4.75 and 4.79) were below the PHCSCSI norm (8.70) for females related to anxiety. Non-sport participants also noted anxiety levels (6.3) below

the PHCSCSI norm. Participation in middle school interscholastic sports programs indicate a positive benefit to reduce anxiety.

The results of the popularity dimension of self-concept were contrary to the researcher's expectations. Athletes hold positions of visibility in the school environment and are recognized by most of the school population; therefore, this researcher expected sports participants to be more popular than the non-sport participants. Data from this study indicated that non-sport participants are more popular than the two-sport participants but not the one-sport participants. These findings, however, are similar to the findings of Puckett and Ford (1981) who found no significant differences in the popularity dimension of self-concept among athletic participants and non-participants.

An examination of the PHCSCSI popularity cluster score reflects evaluation with a student and the students' classmates, being chosen for games, and the ability to make friends. The low score may reflect a lack of interpersonal skills or personality traits which tend to isolate sport participants from non-sport participants. It may also be due to the female sport participant, in this study, comparing herself with other sport participants and not with the female non-sport participants. The examination of the measurement for popularity may not be comprehensive for measuring self-concept popularity as viewed by the subjects.

Additional study is required to better analyze the popularity dimension of the PHCSCSI in varied populations. Present findings on popularity are somewhat unexplainable and need further exploration.

It should be noted that the means for the popularity dimension of self-concept for each of the three groups were below average when compared to the PHCSCSI norm for females (8.33). Piers-Harris (1984) reported the present PHCSCSI norms may underestimate problems in self-concept in populations where the population means are skewed (i.e., urban environments).

Results of this study indicate that athletic participation does not significantly effect self-concept dimensions of happiness and satisfaction, behavior, or self-concept total.

Summary of the Findings: Daily School Attendance

The investigative outcomes regarding daily school attendance of the present study noted significant differences exist between female seventh grade students choosing to participate in interscholastic sports and female seventh grade students choosing not to participate in interscholastic sports. Sport participants reported higher daily school attendance for each of the three consecutive grading periods. However, attendance for the one-sport participants was not significantly different from the two-sport participants. The review of literature suggests that

attendance regulations for eligibility to play interscholastic sports and the commitment to the sport improves daily school attendance. Improved daily school attendance positively effects academic performance.

It should be noted that the Chesapeake school system, compared to other Virginia school districts, reports above average daily school attendance (94 percent) for its public middle schools. This reported attendance is one of the highest attendance figures in Virginia. Considering that a no-sport participant missed 2.63 of 45 days of a grading period indicates being present approximately 94 percent of the time. The two-sport participants noted a daily attendance of 97 percent. The one-sport participants noted a 96 percent daily school attendance. Considering the high rate of attendance for all Chesapeake Middle School students, it is difficult to attribute high attendance for the subjects of this study only to athletic participation. It is evident that other reasons may exist for Chesapeake's high daily school attendance. However, data supports female seventh grade athletes having better attendance than female seventh grade non-athletes.

Statistical data for the three consecutive grading periods indicate significant differences for attendance for the first grading period (1.2 days missed) and the second grading period (2.2 days missed). No differences were noted between the first grading period and the third grading

period (1.9 days missed) or the second grading period and the third grading period. No-sport participants noted the highest rate of absenteeism during the second grading period. The increased absenteeism for the second grading period may be due to normal increased absenteeism for the winter months of the school year. Attendance figures for Chesapeake support increased absenteeism annually for November, December, and January (second grading period). Subjects' increased absenteeism was not due to missing classes or school for athletic competitions. It is noted that interscholastic athletes have better daily school attendance (as reflected by mean scores) than non-athletes for all grading periods.

Summary of the Findings: Grade Point Average

The investigative outcomes regarding grade point average of the present study noted significant differences exist between female seventh grade students choosing to participate in interscholastic sports and female seventh grade students choosing not to participate in interscholastic sports.

Examination of the statistical data noted the mean grade point averages of the female seventh grade middle school students in urban middle schools significantly different among the three levels of athletic participation. The grade point averages (3.47, 3.35, and 3.45) of the two-sport participants were significantly higher than the one-

sport participants (3.02, 2.88, and 2.95) at each of the grading periods. The grade point averages of the one-sport participants were significantly higher than the no-sport participants (2.62, 2.59, and 2.67). These results support female seventh grade sport participants having higher grade point averages than female seventh grade non-sport participants.

Each of the three groups noted a decrease in grade point averages at the end of the second grading period. Grade point averages for the second grading period, when compared to the first grading period, noted the one-sport participants differences in grade point average of $-.14$ for the second grading period. The two-sport participants noted differences in grade point average of $-.12$ for the second grading period. The no-sport participants noted minimal differences in grade point average of $-.02$ for the second grading period. This suggests extended athletic participation may adversely effect the female seventh grade students' academic performance as sport participants grade point averages decreased at a greater rate than the no-sport participants.

The grade point averages of each of the groups were not significantly different from the first grading period to the third grading period. This suggest that athletic participation does not have long-term effects on grade point averages of the female seventh grade students in the urban

middle school.

Conclusions

This study provides positive support for the value of middle school interscholastic athletic programs in the growth and development of female seventh grade students in urban schools. Participation in interscholastic athletics provides middle school female seventh grade female students an encouraging tool to improve three dimensions of self-concept: intellectual and school status; physical appearance and attributes; and anxiety. A fourth dimension, popularity needs to be further evaluated. With a focus on the expansion of an interscholastic middle school program, improved self-concept would have a direct relationship to improved academic performance.

This study further supports previous research (Coleman, 1965; Landers & Landers, 1978) which noted that athletic participation encourages daily school attendance and contributes to reducing school dropout rates. Significant differences exist at the seventh grade level between those who participate in athletics and those who do not participate in athletics. Attendance data also supports the concept of better attendance and better academic achievement. Improved daily school attendance should set a positive routine of dependability for future success.

The effects of athletic participation upon grade point average needs further investigation as data from this study .

indicates that athletic participation has minimal effect on improved grade point average. Two-sport participants had significantly higher grade point averages at the end of the first grading period and maintained the same difference throughout the study. Athletic participation in this study did not statistically improve grade point averages over the three consecutive nine-week grading periods for any of the three groups. The findings of this study on grade point average indicate a much higher grade point average for athletes than previous studies conducted at the high school level but did not show significant improvement over the three consecutive grading periods.

Recommendations

This study accumulated detailed data sufficient to evaluate the effects of middle school interscholastic athletic participation upon self-concept, daily school attendance, and grade point average of female seventh grade students in urban schools. Based on the findings of this study the following recommendations are suggested:

1. A longitudinal study to determine the cumulative effects of athletic participation on self-concept is recommended. The study should consider the number of athletic seasons an athlete has participated to determine the extent, if any, of cumulative benefits.
2. A longitudinal study to determine the cumulative effects of athletic participation on academic achievement of middle

school female students in urban schools is recommended. The study should consider the strength of academic course load. Previous research indicates that the grade point averages of high school students is considerably lower than the findings of this study for grade point averages of middle school female athletes.

3. Educators should be made aware of apparent positive relationships between athletic participation and self-concept for middle school females. However, these positive factors may not be true for high school females. Perhaps additional research will support or reject this difference and provide insight for modification of middle school athletic programs.

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APPENDIXES

Appendix A

Name: _____ School: _____

Check the sports in which you participated during the 1993-1994 school year. Mark the bottom space (none of the above) if you did not participate in any sports listed.

School Sport	Recreation Dept. Sport
<input type="checkbox"/> Basketball	<input type="checkbox"/> Basketball
<input type="checkbox"/> Cheerleading	<input type="checkbox"/> Cheerleading
<input type="checkbox"/> Cross country	<input type="checkbox"/> Soccer
<input type="checkbox"/> Gymnastics	<input type="checkbox"/> None of the Above
<input type="checkbox"/> Volleyball	
<input type="checkbox"/> None of the Above	

Appendix B

September 8, 1993

Chesapeake Public Schools
Dr. Robert A. Cowden
Director of Research, Testing,
and Student Activities
300 Cedar Rd.
Chesapeake, VA 23323

Dear Dr. Cowden:

This letter is written to seek your permission to conduct a research project leading to my doctoral dissertation. As Director of Research and Testing Chesapeake Public Schools, your support in this study is most valuable. The study will help determine the extent to which athletic participation by female seventh grade students affects student self-concept, daily school attendance, and grade point average.

Permission forms will be secured from the parents of all participants. Each seventh grade female student will be asked to complete the Piers-Harris Children's Self-Concept Scale. Grades and attendance data will be collected at nine week intervals for the first three grading periods. Collected data will be held in strict confidence. No participant will be identified by name. All responses will be destroyed after the completion of the project.

Thank you for your consideration and support.

Sincerely,

David L. Olah
Doctorial Candidate
Educational Administration
Old Dominion University

Approved:
Dr. Petra E. Snowden
Graduate Programs Director
and Dissertation Chairman
Director of Education Leadership
and Counseling
Darden College of Education
Old Dominion University

Appendix C

September 8, 1993

Deep Creek Middle School
Mr. Clyde Sheely, Principal
195 Deal Drive
Chesapeake, VA 23323

Dear Mr. Sheely:

This letter is written to seek your permission to conduct a research project leading to my doctoral dissertation. As principal of Deep Creek Middle School, your support in this study is most valuable. The study will help determine the extent to which athletic participation by female seventh grade students affects student self-concept, daily school attendance, and grade point average. I have fully discussed the plans of this study with Dr. Robert Cowden, Director of Testing, Research, and Student Activities, and the feasibility of conducting the study with Deep Creek Middle School students.

Permission forms will be secured from the parents of all participants. Each seventh grade female student will be asked to complete the Piers-Harris Children's Self-Concept Scale. Grades and attendance data will be collected at nine weeks intervals for the first three grading periods. Collected data will be held in strict confidence. No participant will be identified by name. All responses will be destroyed after the completion of the project.

Thank you for your consideration and support.

Sincerely,

David L. Olah
Doctorial Candidate
Educational Administration
Old Dominion University

Approved:
Dr. Petra E. Snowden
Graduate Programs Director
and Dissertation Chairman
Director of Education Leadership
and Counseling
Darden College of Education
Old Dominion University

Appendix D

September, 1993

Dear Parent:

We request permission for your child to participate in a research project conducted by a doctoral student from the Educational Administration Program at Old Dominion University. Approval and cooperation of the Chesapeake Public School System and the principal of Deep Creek Middle School has been granted.

This study focuses upon the self-concept, academic performance, and attendance of seventh grade female students at different times of the school year. The students commitment will involve two fifteen (15) minute test, one in September and one in March. Both tests will be administered during the school day during health and physical education class. Nine week grades and monthly attendance records will also be secured for computation.

Please, be assured that all information will be treated as group data. No individual information will be used in either written or oral presentations. Results will be destroyed after being processed into group information.. Participation in the project is completely voluntary and either the parent or the student may terminate participation at any time. A copy of the findings will be available to you upon request.

Please, check one of the boxes below and return this form to the health and physical education teacher.

_____ I grant permission for my child to participate in this study as described above and for release of attendance and grades for the three nine weeks grading periods for the 1993-1994 school year.

_____ I do not wish to have my child participate in this study.

Parent signature

Student's Name: _____

Health and Physical Education Teacher: _____

Thank you for allowing participation and giving support to this study.

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AUTOBIOGRAPHICAL STATEMENT

David Olah was born in Norfolk, Virginia on February 14, 1945. He was one of six children born to John and Eva Olah.

Mr. Olah received his Bachelor of Science in Health and Physical Education from Old Dominion College in May of 1967. He was conferred a Master of Education Degree in Guidance and Counseling from Old Dominion University in May of 1980. The Certificate of Advanced Studies in Educational Administration was conferred in August of 1985.

Upon graduation from Old Dominion College, he joined the Chesapeake Public School system as a teacher. His work experience includes 5 years as teacher of junior high school Health and Physical Education, 8 years as teacher of Driver's Education, and 14 years as secondary school Guidance Counselor, the position he currently holds. During his first 25 years of teaching, Mr. Olah coached a variety of male and female interscholastic sports. He has been recognized twice by the Virginia High School League, Inc. as the Virginia Wrestling Coach of the year and once by the National High School League Federation as Region 8 Wrestling Coach of the year. The Deep Creek Lions Club named him Citizen of the year (1991-1992) for his extended services to the Deep Creek and Chesapeake communities.

He was married to Sandra Muse on June 13, 1965. They have two children, Tammy and David.